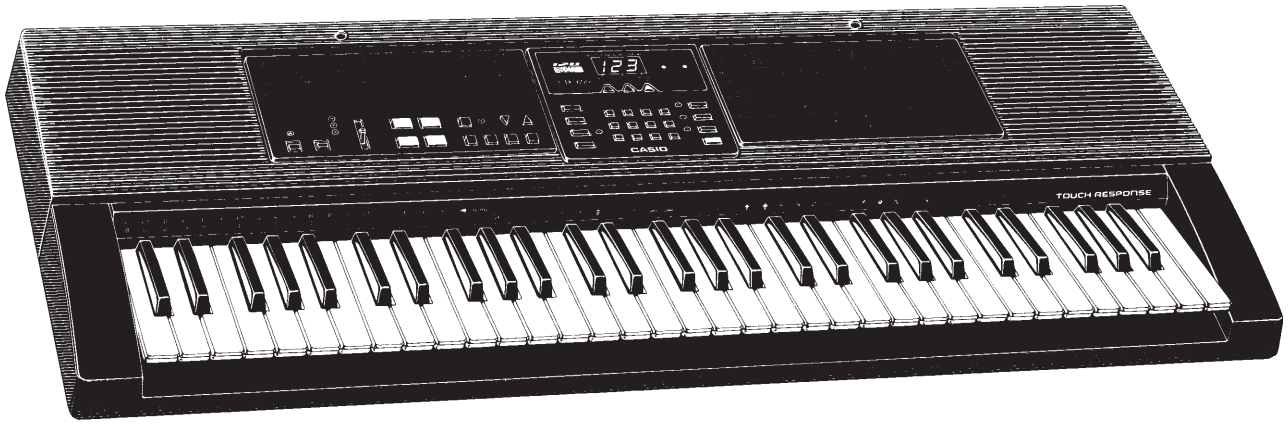
CASIO®

Service Manual

(with price)

CTK-650



CTK-650

MC-Service

ELECTRONIC KEYBOARD

INDEX

CONTENTS

SPECIFICATIONS 1

BLOCK DIAGRAM 2

CIRCUIT DESCRIPTION

- CPU (HD6433298A16P : H8/329) 3
- DIGITAL SIGNAL PROCESSOR, LSI-S (HG51A115A01FD) 4
- KEY TOUCH LSI (HG52E35P) 5
- POWER AMPLIFIER (LA4598) 6
- BUTTON MATRIX 7
- KEY MATRIX 8

WIRING DIAGRAM 9

IC LEAD IDENTIFICATION AND INTERNAL CIRCUIT 10

PCB VIEW AND MAJOR WAVEFORMS 12

SCHEMATIC DIAGRAM 13

PARTS LIST 15

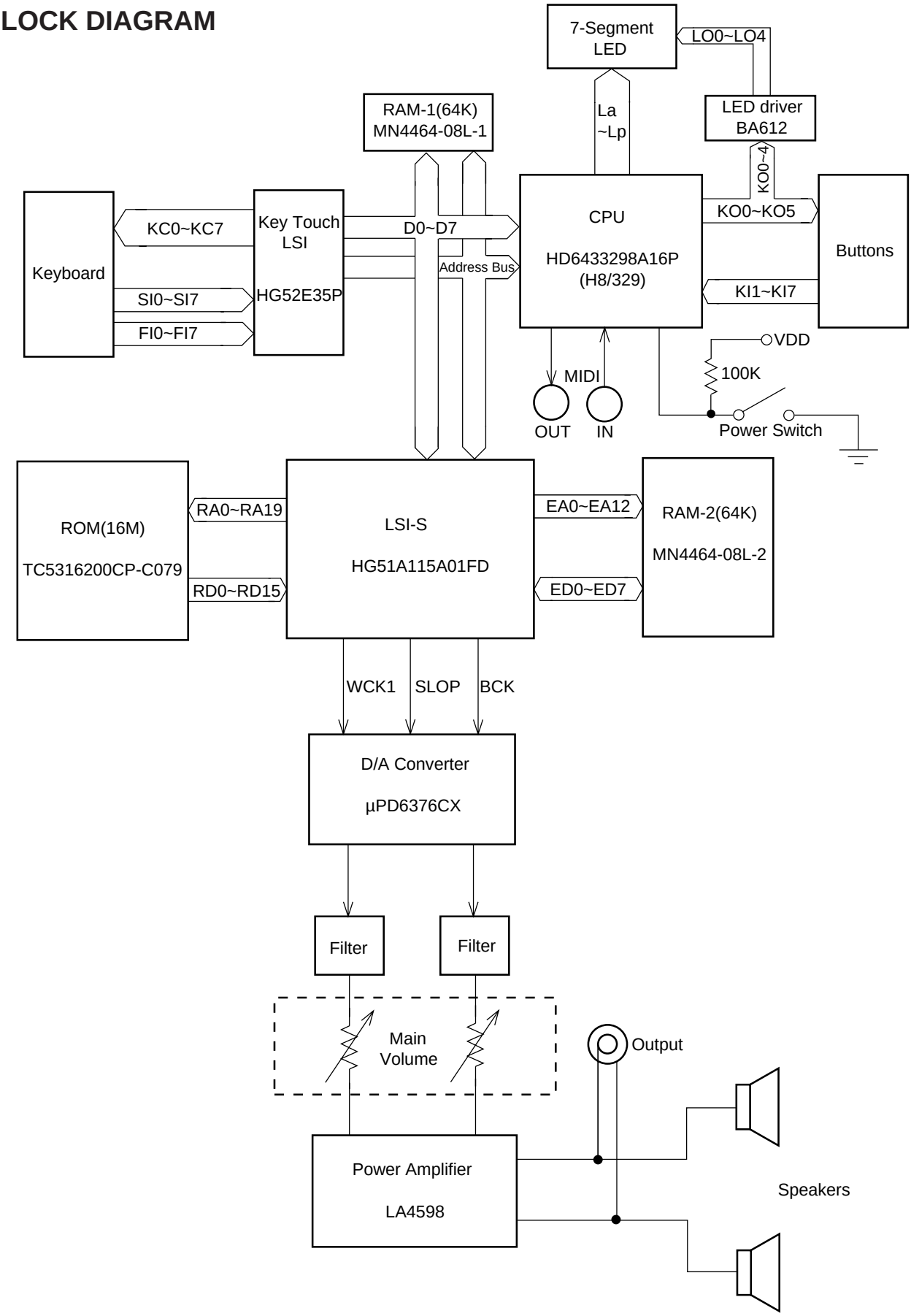
EXPLODED VIEW 19

SPECIFICATION

Number of keys:	61			
Polyphony:	32-note(max.)			
Preset tones:	128			
Magical preset:	BREAK BEAT	16	MELODYCOMP	8
	SHADOW DRUM	4	FREE SESSION	32
	TONE STACK	40	KEY SPLIT	12
	HYPERACTIVE	16		
Auto-accompaniment:	Rhythm patterns	128		
	Tempo	Adjustable(40 - 255)		
	Chords	Three system: CASIO CHORD, FINGERD, FULL-RANGE CHORD		
	Other	Variation pattern, fill-in pattern, intro/ending pattern for each rhythm.		
Song memory:	song:one			
	System:Real-time recording			
	Memory capacity:Up to 1,300 notes			
Registration memory:	4 setups			
Sound control pads:	Phrases	10		
	Drums	10		
	SE/Percussion	10		
	Controller	2		
Digital effects:	REVERB 1, REVERB 2, REVERB 3, CHORUS, TREMOLO, PHASE SHIFTER, ORGAN SP, ENHANCER, FLANGER, EQLOUNDNESS			
DEMO tunes:	3 tunes			
Other functions:	Transpose (F# ~ C ~ F : half-note)			
	Tuning adjustable A4 = 440KHz 50 cents increments			
	Volume control (Main /Accompaniment)			
Speakers:	12cm diameter X 2 (Output:2W+2W)			
I/O terminals:	Power supply	9V DC jack		
	Headphones	Stereo mini jack		
		Output impedance:100 ohm		
		Output voltage:4.5V(RMS. max)		
	Assignable jack	Standard jack		
	MIDI	IN, OUT		
Power supply:	3-way AC/DC power sources;			
	Batteries	Six D-size		
	Battry life	Approximately 5 hours on R20P(SUM-1)		
	AC	Required optional AD-5 AC adaptor		
	Car battery	Required optional CA-5 car adaptor		
Auto power off:	Approximately 6 minutes after the last operation			
Power consumption:	7.7W			
Dimensions:	942 X 367 X 135 mm(HWD)			
	31 7/16" X 14 1/2" X 4 3/8" inches(HWD)			
Weight:	5.2kg(11.7lbs) excluding batteries			
Accessory:	Score stand			

MC-Service

BLOCK DIAGRAM



CIRCUIT DESCRIPTION

CPU(HD6433298A16P : H8/329)

The 16-bit CPU contains a 32K-byte ROM, a 1K-byte RAM, an 8-bit A/D converter, timers and I/O ports. The CPU accesses to the DSP, Key Touch LSI, RAM, buttons and LEDs. But the CPU directly receives MIDI and pedal signals.

Pin No.	Terminal	In/Out	Function
1	P40/IRQ2	In	KO signal data.
2	P41/IRQ1	In	Timing signal for KO signal.
3	P42/IRQ0	In	APO signal output.
4	P43/-RD	Out	Read signal outpt.
5	P44/-WR	Out	Write signal output.
7	P46/PHI	Out	System clock output.
8	P47/-WAIT	In	Wait signal input
9	P50/Txd	Out	MIDI signal output.
10	P51/Rxd	In	MII signal input.
11	P52/SCK	Out	Reset signal output.
12	-RESET	In	Reset signal input.
13	-NMI	In	Power on signal input.(Low active)
14	Vcc	In	+5V source.
15	-STBY	In	Standby signal input. Connected to +5V.
16	Vss	In	Ground(0V) source.
17,18	XTAL,EXTAL	In/Out	20MHz clock pulse input/output. Connected to crystal.
19,20	MD1,MD0	In	Selection for system.
21	AVss	In	Analog ground source.
22	P70/AN0	In	Connected to ground.
23~29	P71/AN0~P77/AN7	In	KI signal input.
30	AVcc	In	+5V source.
31~38	P60/FTCI~P67/TMO1	Out	Control signal for 7-segment LED.
39	Vcc	In	+5V source.
41~56	P26/A14~P10/A0	Out	Address bus.
48	Vss	In	Ground(0V) source.
57~64	P30/D0~P37/D7	In/Out	Data bus.

MD1	MD0	MODE
0	1	MODE-1 : Internal ROM mode
1	0	MODE-2 : Non internal ROM mode
1	1	MODE-3 : Single chip mode

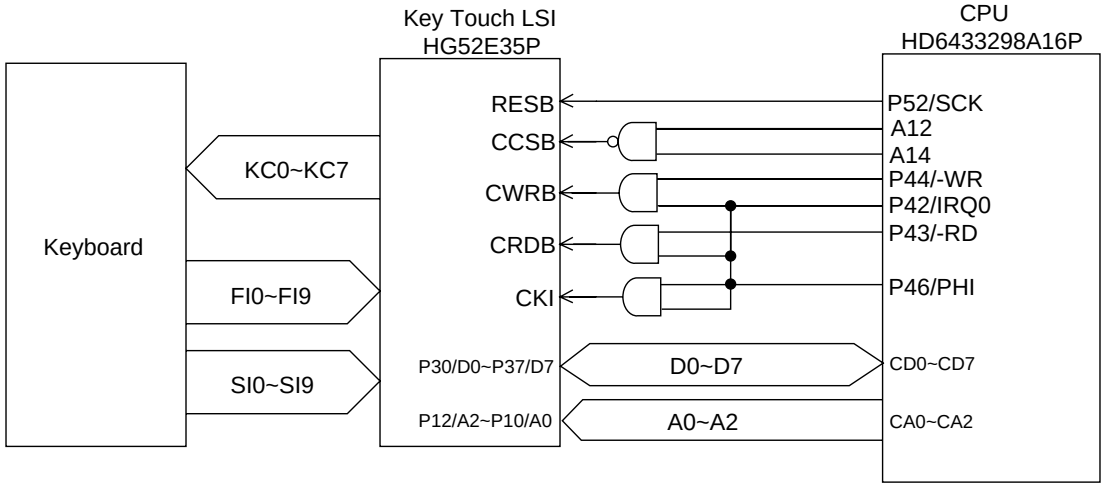
DIGITAL SIGNAL PROCESSOR, LSI-S (HG51A115A01FD)

The LSI-S is a 16-bit DSP(Digital Signal Processor) and accessable to 16M-bit sound source ROM and to 64K-bit RAM. The DSP can read data of 32 polyphonic note from the ROM and provides two 16-bit serial dat with timing signals to each channel's D/A converter.

Pin No.	Terminal	In/Out	Function
1~7	D7~D0	I/O	Data bus.
11	GND7	In	Ground(0V) source.
12	CK16	Out	16.384MHz clock pulse output.
13	VCC6	In	+5V source
14	CK0	In	Clock pulse input. Connected to terinal CK16.
16	VCC1	In	+5V source.
17	GND1	In	Ground(0V) source.
18,19	XTI, XTO	In/Out	16.384MHz clock pulse input/output. Connected to crystal.
21	CCSB	I	Chip select signal input.
22~25	CA0~CA3	In	Address bus.
26	CE0	In	Connected to ground.(ROM interface ontrol terminal)
27	CWRB	In	Write enable signal.
28	CRDB	In	Read enebla signal.
33	RESB	In	Reset sna iput
34	TESB	In	Connected to +5V.
40~49 52~57	RD0~RD15	In	Data bus for sound source ROM.
50	VCC2	In	+5V source.
51	GND2	In	Ground(0V) source.
59	RA22	Out	Chip enable signal output for ROM.
62~73 75~82	RA0~RA19	Out	Address bus for sound source ROM.
74	GND5	In	Ground(0V) source.
84	VCC3	In	+5V source.
85	GND3	In	Ground source.
86	WOK1	Out	Ward clock for DAC.
88	SOLP	Out	16-bit serial data for L-channel DAC.
89	BOK	Out	Bit clock for DAC.
93	VCC5	In	+5V source.
95,97 99~105 107,109 110,112	EA0~EA12	Out	Address bus for RAM.
96	EWEB	Out	Write enable signal for RAM.
106	EOEB	Out	Read enable signal for RAM.
108	VCC7	In	+5V source.
111	ECEB	Out	Chip eneble signal for RAM.
118	VCC4	In	+5V source.
119	GND4	In	Ground(0V) source.
123~130	ED0~ED7	In/Out	Data bus for RAM.
131	GND6	In	Connected to Ground.
132	SSI	In	Connected to Ground.
133	SBCK	In	Connected to Ground.
134	SWCK	In	Connected to Ground.

KEY TOUCH LSI(HG52E35P)

By counting the time between the first key input signal FI and the second SI from the keyboard unit, the key touch LSI detects key velocity of 256-step. Then the LSI sends the CPU note numbers and their velocities.



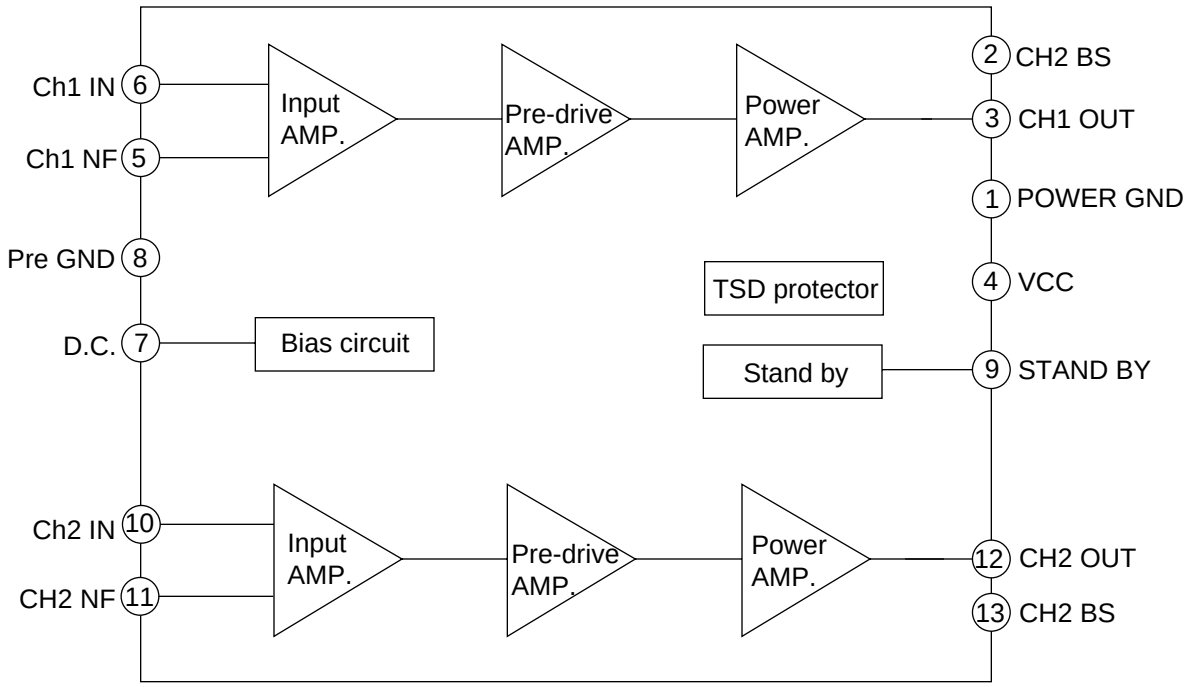
Pin No.	Terminal	In/Out	Function
1	REQB	Out	Interrupt request. Not used.
2,3	FI10,SI10	In	Connected to +5V.
4	VCC	In	+5V source.
5	CRDB	In	Read enable signal.
6	CWRB	In	Write enable signal.
7	CCBB	In	Chip select signal.
8	T	In	Test terminal. Connected to +5V.
9	STYB	In	Standby terminal. Connected to +5V.
10	RESB	In	Reset signal.
11	W	In	Test terminal. Connected to +5V.
12	CKI	In	External clock input.
13	TMD	In	Test terminal. Connected to ground.
14	TST	In	Test terminal. Connected to ground.
15	CKO	Out	External clock output. Not used.
16	GND	In	Ground(0V) source.
17	XIN	In	Clock pulse input. Connected to ground.
18	XOUT	Out	Clock pulse output. Not used.
19	TRES	In	Test terminal. Connected to ground.
20~28	CD0~CD7	In/Out	Data bus.
24	GND	In	Ground(0V) source.
29~31	CA0~CA2	Out	Address bus.
32	VCC	In	+5V source.
33~43 53~55 57~63	FI0~FI9 SI0~SI9	In	Key input signal.
40	VCC	In	+5V source.
44~53	KC0~KC7	Out	Key scan signal.
48,56	GND	In	Ground(0V) source.
54	VCC	In	+5V source.

POWER AMPLIFIER(LA4598)

LA4598 is 2-channel power amplifier with standby switch.

Pin No.	Terminal	In/Out	Function
1	Power GND	In	Ground(0V) source.
2	Ch1 B.S.	-	Terminal for bootstrap capacitor.
3	Ch1 OUT	Out	Channel 1 output.
4	VCC	In	+9V source.
5	Ch1 N.F.	In	Negative feedback input.
6	Ch1 IN	In	Channel 1 input.
7	D.C.	-	Terminal for decoupling capacitor.
8	Pre GND	In	Ground(0V) source.
9	Standby	In	Control signal input. 0V:OFF / +9V:ON
10	Ch2 IN	In	Channel 2 input.
11	Ch2 N.F.	In	Negative feedback input.
12	Ch2 OUT	Out	Channel 2 output.
13	Ch2 B.S.	-	Terminal for bootstrap capacitor.
14	NC	-	Not used.

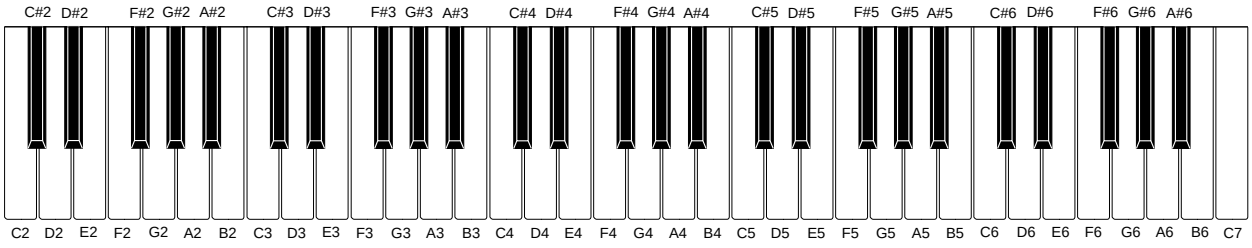
INTERNAL BLOCK DIAGRAM



BUTTON MATRIX

	KI1	KI2	KI3	KI4	KI5	KI6	KI7
KO0	3	0	ACCOMP VOLUME		2	1	SONG NO.
KO1	SPLIT	REGIST-RATION MEMORY	DEMO		LAYER	TOUCHCOVE ON/OFF	MULTI EFFECTOR
KO2	+	9	TONE	MAGICAL PRESET	7	8	RHYTHM
KO3	VARIATION-A	TEMPO DOWN	INTRO	TEMPO UP	VARIATION-B	END/ SYNCHRO	START/STOP
KO4	6	–		MIDI	5	4	TRANSPOSE TUNE
KO5	B	CHORD	D	A			C

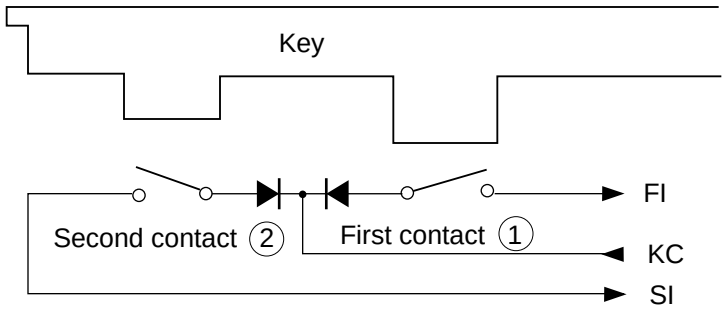
Nomenclature of Keys



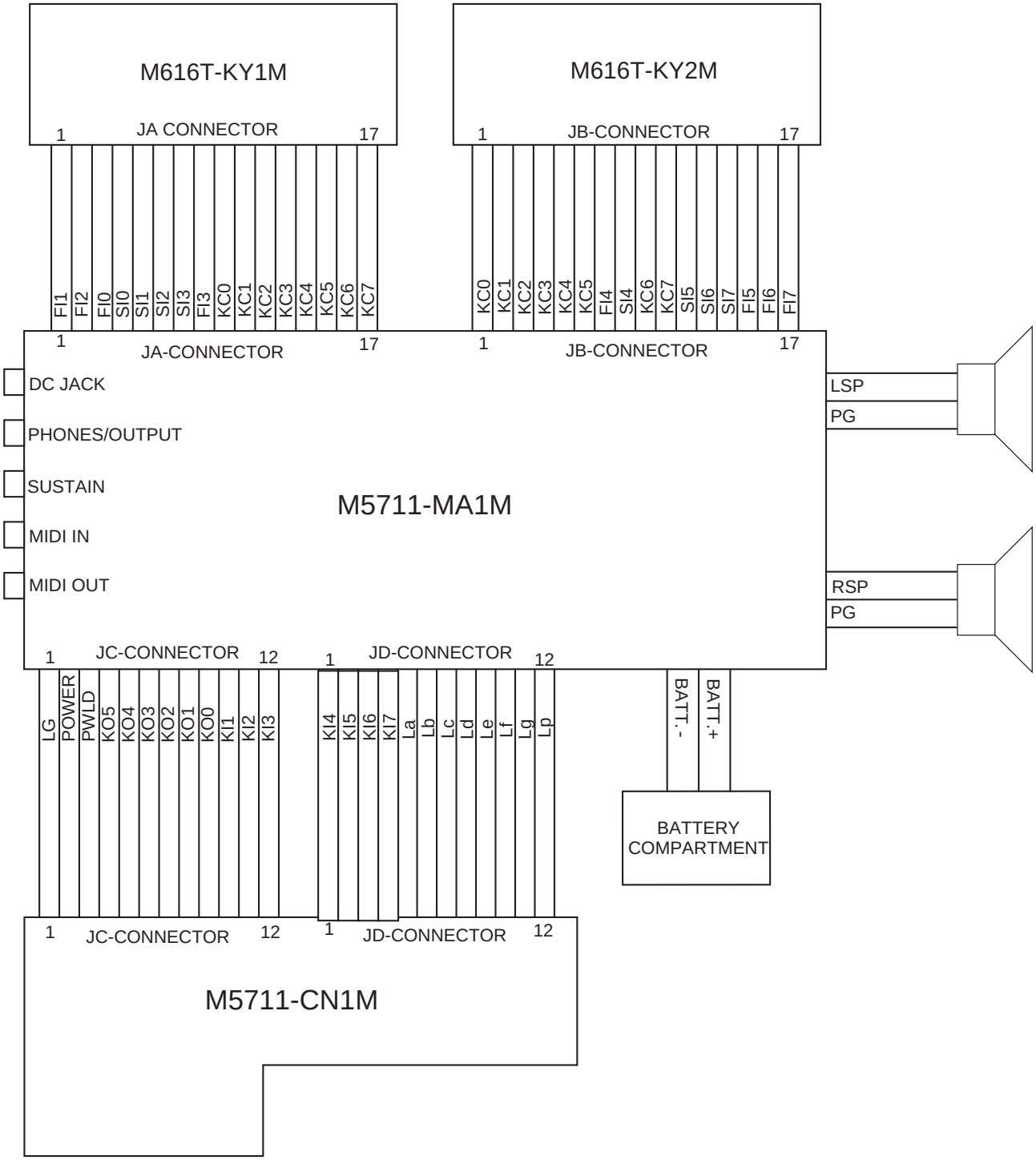
KEY MATRIX

	KC0	KC1	KC2	KC3	KC4	KC5	KC6	KC7
FI0	C2 ①	C#2 ①	D2 ①	D#2 ①	E2 ①	F2 ①	F#2 ①	G2 ①
SI0	C2 ②	C#2 ②	D2 ②	D#2 ②	E2 ②	F2 ②	F#2 ②	G2 ②
FI1	G#2 ①	A2 ①	A#2 ①	B2 ①	C3 ①	C#3 ①	D3 ①	D#3 ①
SI1	G#2 ②	A2 ②	A#2 ②	B2 ②	C3 ②	C#3 ②	D3 ②	D#3 ②
FI2	E3 ①	F3 ①	F#3 ①	G3 ①	G#3 ①	A3 ①	A#3 ①	B3 ①
SI2	E3 ②	F3 ②	F#3 ②	G3 ②	G#3 ②	A3 ②	A#3 ②	B3 ②
FI3	C4 ①	C#4 ①	D4 ①	D#4 ①	E4 ①	F4 ①	F#4 ①	G4 ①
SI3	C4 ②	C#4 ②	D4 ②	D#4 ②	E4 ②	F4 ②	F#4 ②	G4 ②
FI4	G#4 ①	A4 ①	A#4 ①	B4 ①	C5 ①	C#5 ①	D5 ①	D#5 ①
SI4	G#4 ②	A4 ②	A#4 ②	B4 ②	C5 ②	C#5 ②	D5 ②	D#5 ②
FI5	E5 ①	F5 ①	F#5 ①	G5 ①	G#5 ①	A5 ①	A#5 ①	B5 ①
SI5	E5 ②	F5 ②	F#5 ②	G5 ②	G#5 ②	A5 ②	A#5 ②	B5 ②
FI6	C6 ①	C#6 ①	D6 ①	D#6 ①	E6 ①	F6 ①	F#6 ①	G6 ①
SI6	C6 ②	C#6 ②	D6 ②	D#6 ②	E6 ②	F6 ②	F#6 ②	G6 ②
FI7	G#6 ①	A6 ①	A#6 ①	B6 ①	C7 ①			
SI7	G#6 ②	A6 ②	A#6 ②	B6 ②	C7 ②			

Note:Each key has two contacts, the first contact ① and second contact ②.

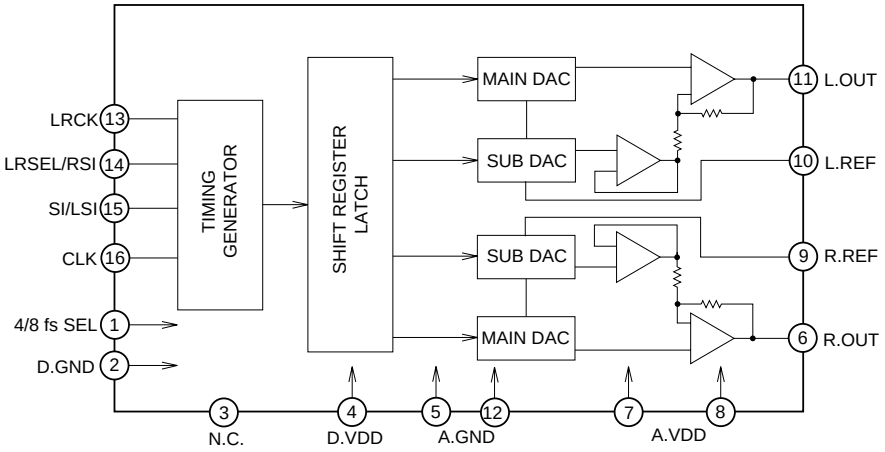


WIRING DIAGRAM

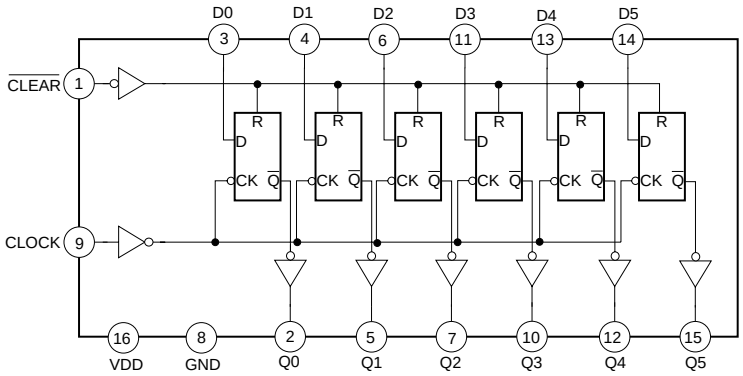


IC LEAD IDENTIFICATION AND INTERNAL CIRCUIT

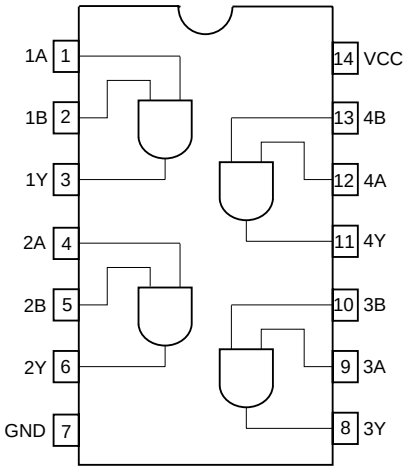
UPD6376CX (D/A converter)



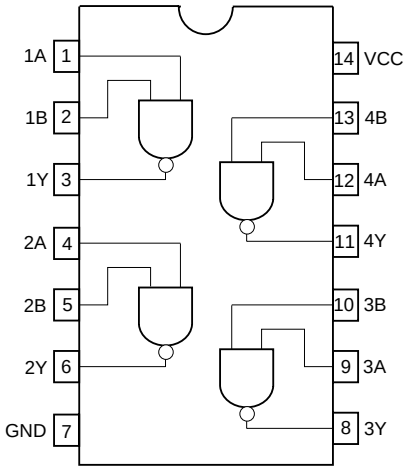
TC74HC174AP (HEX D-TYPE FLIP FLOP WITH CLEAR)



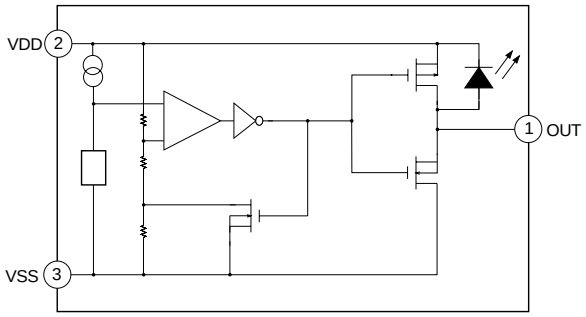
TC74HC08AP (QUAD 2-INPUT AND GATE)



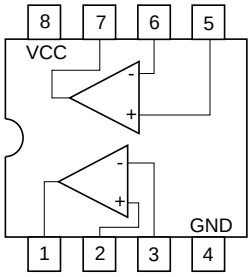
TC74HC00AP (QUAD 2-INPUT NAND GATE)



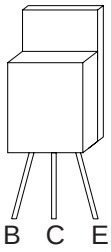
S-8053ANO



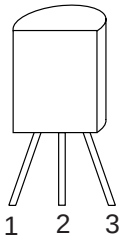
M5218APR



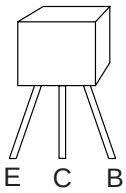
2SB1274



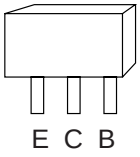
S-81350HG
S-8053ANO



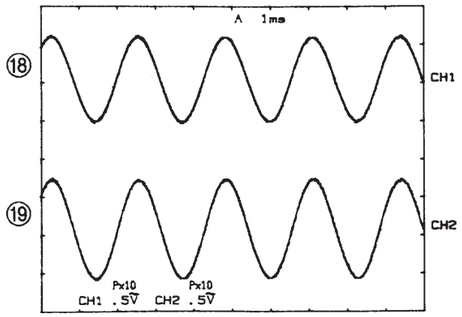
2SC1740
DTA114TS
2SA933



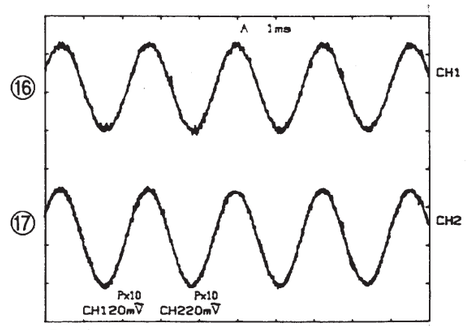
2SB1240
2SD1858



PCB VIEW & MAJOR WAVEFORMS

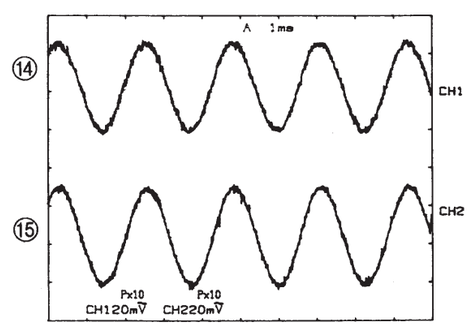


⑱ Power AMP. R-ch output
LA4598 Pin 3
⑲ Power AMP. L-ch output
LA4598 Pin 12



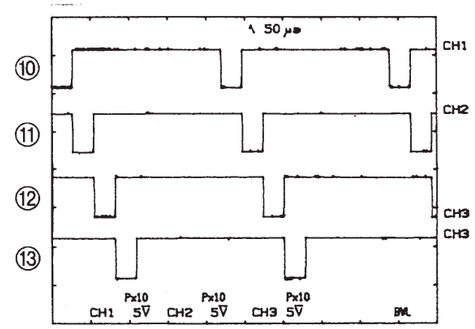
⑯ Filter R-ch output
M5218APR Pin 7
⑰ Filter L-ch output
M5218APR Pin 1

Tone : 078
Key : A4
Touch : Max

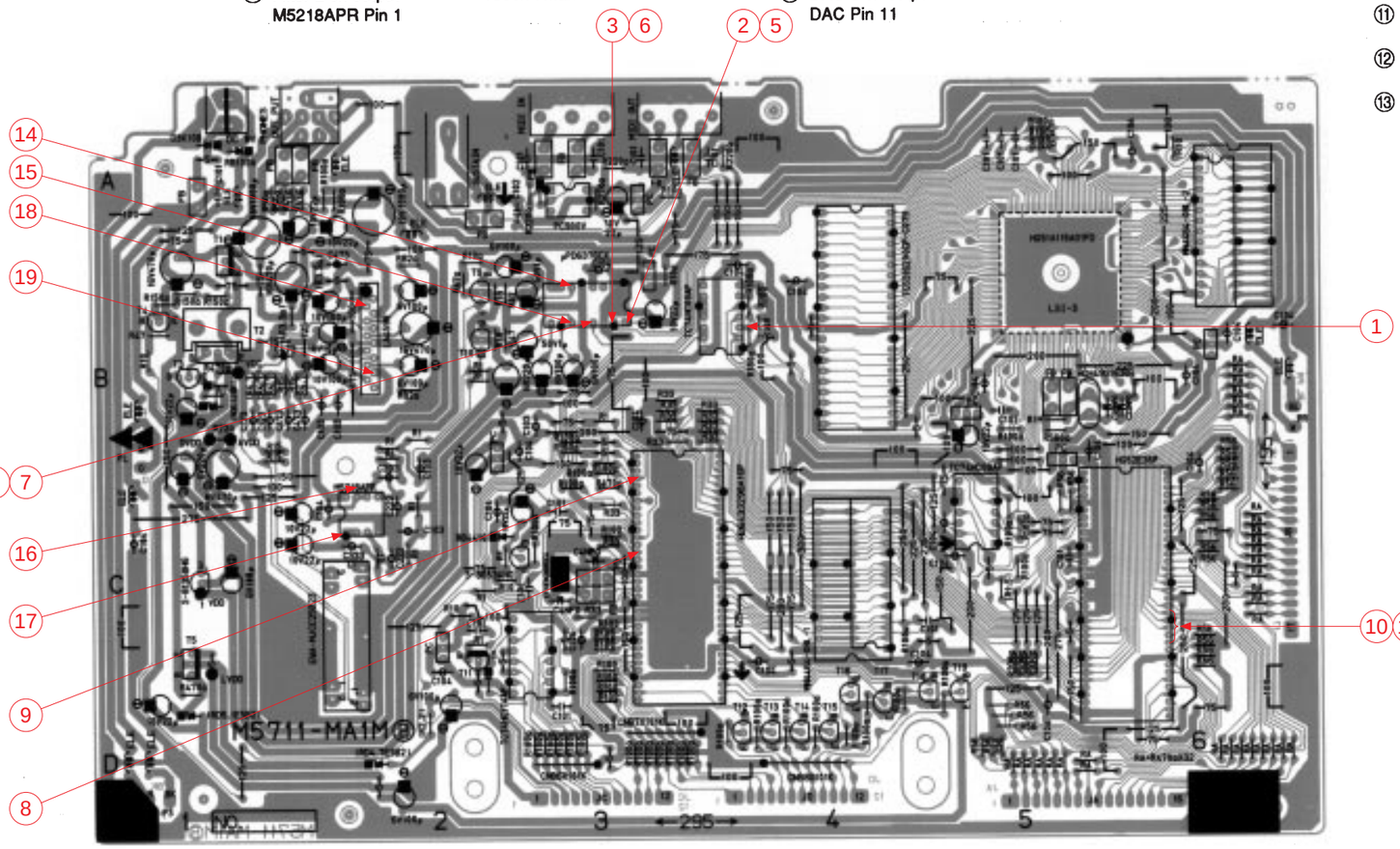


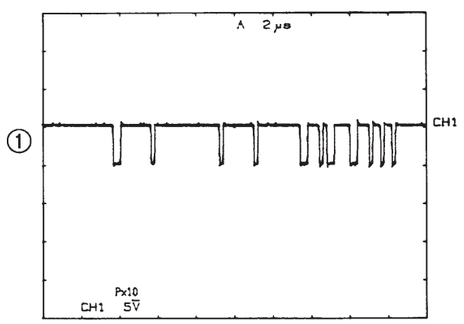
⑭ DAC R-ch output
DAC Pin 6
⑮ DAC L-ch output
DAC Pin 11

Tone : 078
Key : A4
Touch : Max

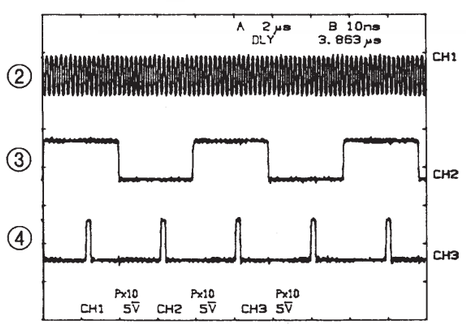


Key scan signals
⑩ KC0
HG52E35P Pin 44
⑪ KC1
HG52E35P Pin 45
⑫ KC3
HG52E35P Pin 46
⑬ KC4
HG52E35P Pin 47





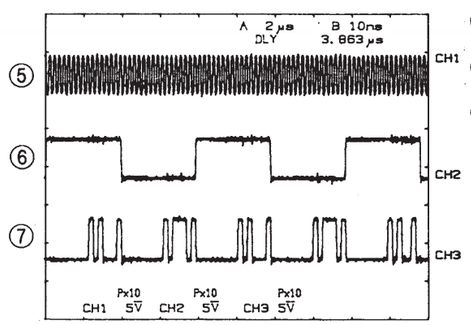
① Chip select for HG52E35P
TC74HC00AP Pin 3



② Basic clock
DAC Pin 16
③ LR clock
DAC Pin 15
④ Sound data
DAC Pin 13

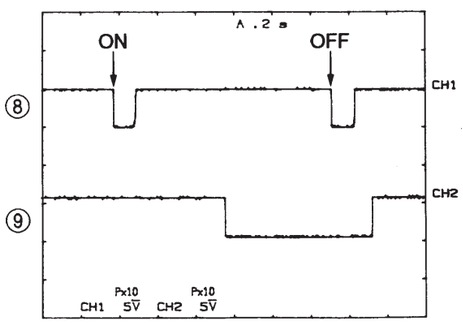
No sound

MC-Service



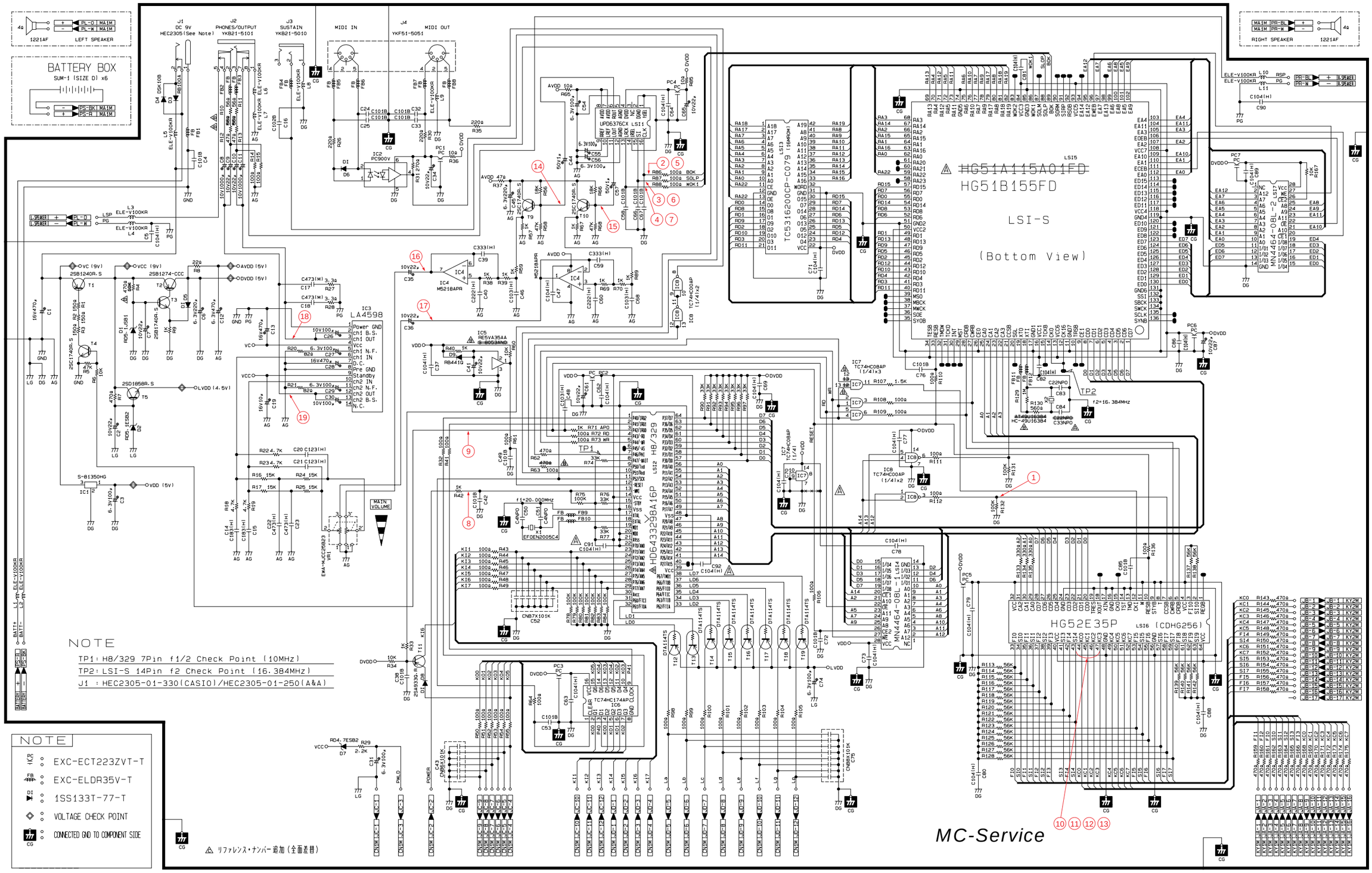
⑤ Basic clock
DAC Pin 16
⑥ LR clock
DAC Pin 15
⑦ Sound data
DAC Pin 13

Tone : 000
Key : A4

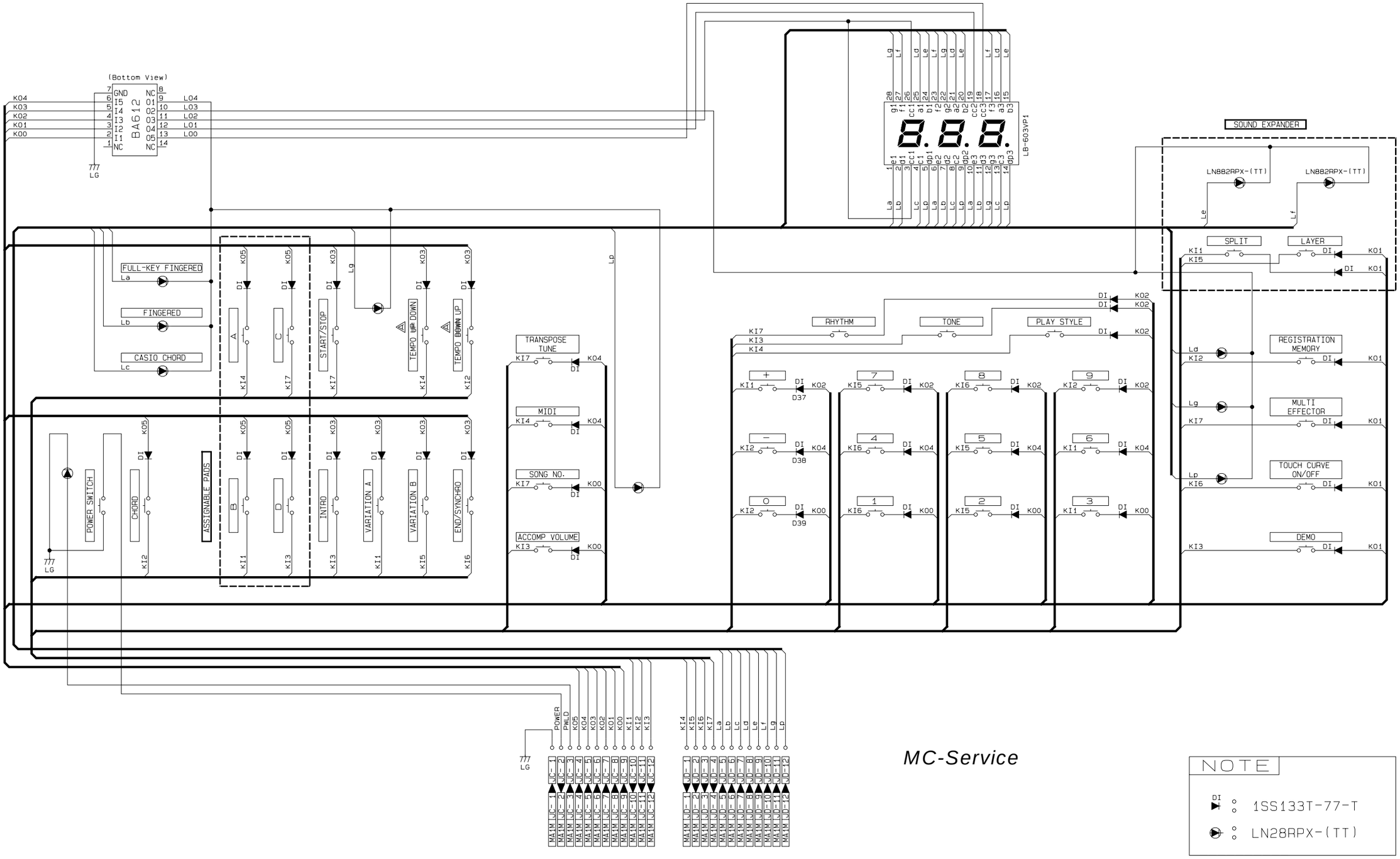


⑧ Power ON/OFF signal
Power switch
⑨ Auto power off signal
CPU Pin 3

SCHEMATIC DIAGRAM M5711-MA1M



SCHEMATIC DIAGRAM M5711-CN1M



MC-Service

NOTE

DI : 1SS133T-77-T

LN28RPX-(TT)

PARTS LIST

CTK-650

Notes:

1. Prices and specifications are subject to change without prior notice.
2. As for spare parts order and supply, refer to the "GUIDEBOOK for Spare parts Supply", published separately.
3. The numbers in item column correspond to the same numbers in drawing.

MC-Service

N	Item	Code No.	Parts Name	Specification	Q	M	FOB Japan N.R.Yen Unit Price	R	*
		PCB ass'y M5711-MA1M							
		2011 3325	LSI	UPD6376CX	1	1	230	A	C
		2011 5194	LSI	HG52E35P	1	1	600	A	F
		2011 5201	LSI	HG51A115A01FD	1	1	2,820	A	T
N		2011 6797	LSI	LC3564Q-85.10	2	1	280	A	C
N		2011 6944	LSI	TC5316200CP-C079	1	1	1,230	A	N
N		2011 7021	LSI	HD6433298A16P	1	1	880	A	J
N		2105 2114	IC, Regulator	S-81350HG	1	5	65	A	B
		2105 2219	MOS IC	S-8053ANO	1	5	60	A	B
N		2105 2912	C-MOS	HD74HC08P	1	10	28	A	A
		2105 3045	C-MOS	HD74HC174P	1	5	49	A	A
N		2105 3136	C-MOS	HD74HC00P	1	10	28	A	A
		2114 1421	IC, Photo-coupler	PC900V	1	1	210	A	C
		2114 1799	IC, Monolithic	M5218APR	1	1	38	A	A
		2114 2891	IC, Monolithic	LA4598	1	1	140	A	B
N		2251 0665	Transistor	2SB1240R.S-TV6-T	1	20	26	A	A
N		2251 0672	Transistor	2SB1548-P.CS	1	10	44	A	A
		2252 0889	Transistor	2SA1267Y,GR-AT-T	1	20	8	A	A
		2252 0896	Transistor	2SC1740S-R,S-TP-T	4	20	8	A	A
N		2253 0581	Transistor	2SD1858R.S-TV6-T	1	20	24	A	A
N		2259 1883	Digital transistor	DTA114TS-TP-T	8	20	10	A	A
		2310 7996	Zener diode	RD4.7ESB2-T1-T	1	20	12	A	A
		2360 0098	Zener diode	RD5.1ESB2-T1-T	1	20	14	A	A
N		2360 2233	Zener diode	RD5.1JSB1-T1-T	1	20	8	A	A
		2390 0371	Diode	DSK10B-BT-T	1	20	11	B	A
		2390 1316	Diode	SB10-04A3-BT-T	1	20	28	B	A
		2390 1344	Diode	1SS133T-77-T	3	20	3	C	A
N		2390 1995	Diode	RB441Q-T77-T	1	20	16	B	A
N		2590 1519	Crystal oscillator	HC-49U16384	1	1	100	A	B
N		2590 1526	Ceramic oscillator	EFO-EN2005C4	1	5	62	A	B
		2606 1141	Carbon film resistor	R-20-1K-J-T23-T	13	20	2	C	A
		2606 1148	Carbon film resistor	R-20-220-J-T23-T	3	20	2	C	A
		2606 1155	Carbon film resistor	R-20-330-J-T23-T	3	20	2	C	A
		2606 1162	Carbon film resistor	R-20-10-J-T23-T	3	20	2	C	A
		2606 1169	Carbon film resistor	R-20-100-J-T23-T	40	20	2	C	A
		2606 1176	Carbon film resistor	R-20-100K-J-T23-T	10	20	2	C	A
		2606 1183	Carbon film resistor	R-20-10K-J-T23-T	4	20	2	C	A
		2606 1197	Carbon film resistor	R-20-22-J-T23-T	1	20	2	C	A
		2606 1204	Carbon film resistor	R-20-3.3-J-T23-T	2	20	2	C	A
		2606 1218	Carbon film resistor	R-20-56-J-T23-T	2	20	2	C	A
		2606 1232	Carbon film resistor	R-20-82-J-T23-T	2	20	2	C	A
		2606 1253	Carbon film resistor	R-20-4.7K-J-T23-T	4	20	2	C	A
		2606 1274	Carbon film resistor	R-20-1.5K-J-T23-T	1	20	2	C	A
		2606 1288	Carbon film resistor	R-20-2.2K-J-T23-T	1	20	2	C	A
		2606 1302	Carbon film resistor	R-20-270-J-T23-T	1	20	2	C	A
		2606 1309	Carbon film resistor	R-20-470-J-T23-T	35	20	2	C	A
		2606 1316	Carbon film resistor	R-20-47K-J-T23-T	3	20	2	C	A
		2606 1323	Carbon film resistor	R-20-56K-J-T23-T	22	20	2	C	A
		2606 1337	Carbon film resistor	R-20-1M-J-T23-T	1	20	2	C	A
		2606 1372	Carbon film resistor	R-20-33K-J-T23-T	11	20	2	C	A
		2606 1386	Carbon film resistor	R-20-15K-J-T23-T	4	20	2	C	A
		2606 1435	Carbon film resistor	R-20-560-J-T23-T	1	20	2	C	A
		2606 1442	Carbon film resistor	R-20-18K-J-T23-T	2	20	2	C	A
N		2606 1526	Carbon film resistor	R-20-150-J-T23-T	3	20	2	C	A
N		2606 1708	Carbon film resistor	R-20-47-J-T23-T	3	20	2	C	A

Notes: N – New parts
M – Minimum order/supply quantity
R – Rank

MC-Service

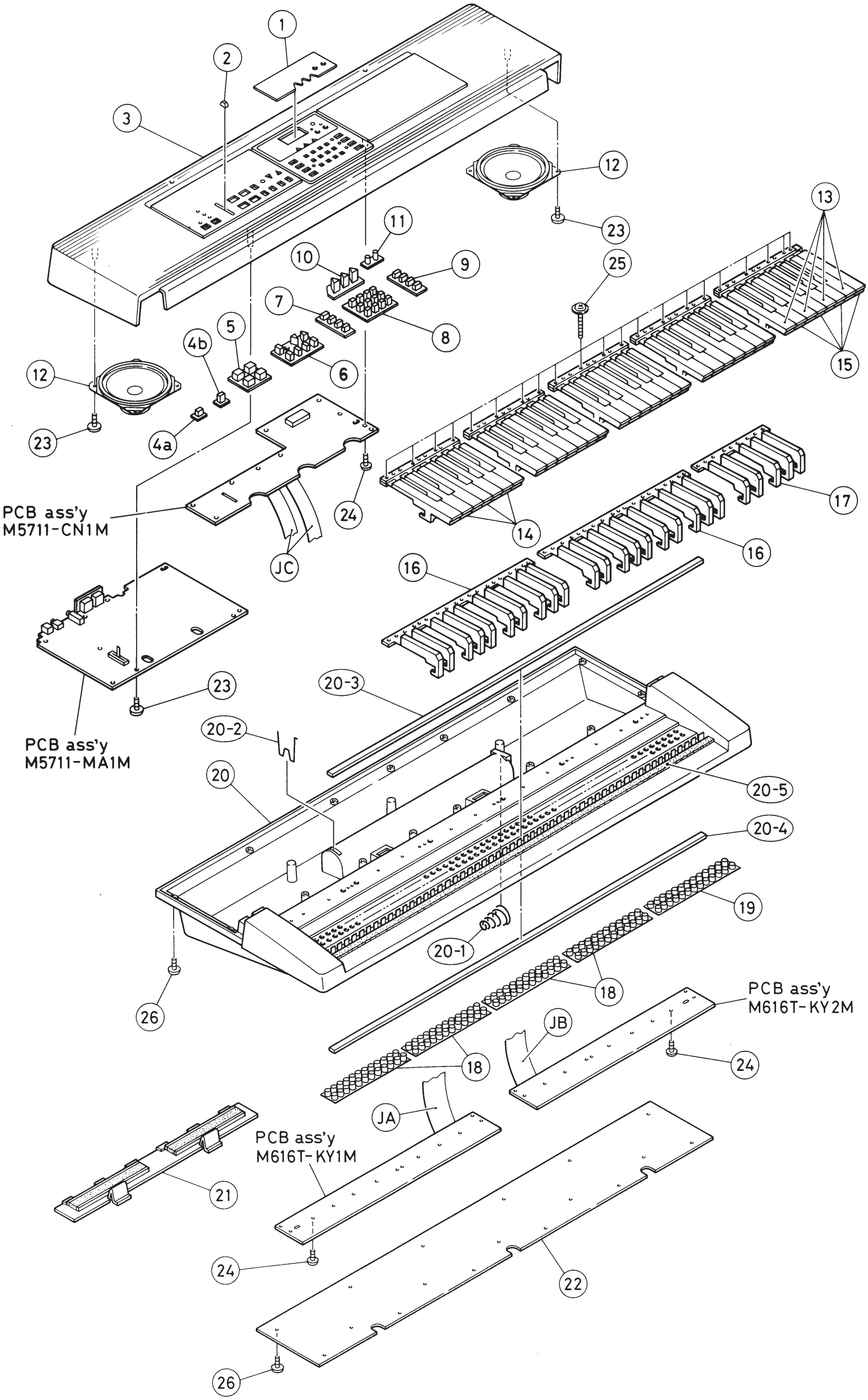
N	Item	Code No.	Parts Name	Specification	Q	M	FOB Japan N.R.Yen Unit Price	R	*
		2765 1344	Slide volume	EWA-MJCC25B23	1	1	110	A	B
		2801 7910	Electrolytic capacitor	16RE3-470-T2-T	3	10	27	C	A
		2805 2341	Electrolytic capacitor	10RE2-1000-S1	2	10	45	C	A
		2805 3061	Electrolytic capacitor	6.3RE2-220-T2-T	2	10	26	C	A
		2805 3134	Electrolytic capacitor	10RE2-22-T2-T	11	20	14	C	A
		2805 3142	Electrolytic capacitor	16RE2-10-T2-T	1	20	14	C	A
		2807 1023	Electrolytic capacitor	50RE2-1-T2-T	2	20	15	C	A
		2807 1040	Electrolytic capacitor	6.3RE2-470-T2-T	1	10	27	C	A
		2807 1091	Electrolytic capacitor	6.3RE2-100-T2-T	8	20	18	C	A
		2807 1112	Electrolytic capacitor	10RE2-100-T2-T	2	20	12	C	A
		2813 1197	Semiconductive capacitor	DD404SR103K16-T	3	20	6	C	A
		2813 1218	Semiconductive capacitor	DD404SR222K16-T	2	20	15	C	A
		2813 1722	Semiconductive capacitor	DD407SR104K16-T	22	20	9	C	A
		2813 2128	Semiconductive capacitor	DD405SR473K16-T	2	20	7	C	A
		2813 2254	Semiconductive capacitor	DD405SR333K16-T	2	20	6	C	A
		2813 2429	Semiconductive capacitor	DD404SR183K16-T	2	20	5	C	A
N		2813 3353	Semiconductive capacitor	DD404SR123K16-T	2	20	5	C	A
		2818 0365	Ceramic capacitor	RT-HE50TKYB102K-T	1	20	3	C	A
		2818 0446	Ceramic capacitor	RT-HE40TKYB101K-T	15	20	4	C	A
		2818 2465	Ceramic capacitor	RT-HE40TKCH040D-T	2	10	8	C	A
		2818 3275	Ceramic capacitor	RT-HE40TKCH220J-T	2	20	5	C	A
		2830 6436	Mylar capacitor	AMZV-473K50-T	2	10	9	C	A
		2845 0168	Module capacitor	CNB8X101K	1	5	58	C	B
		2845 0175	Module capacitor	CNB7X101K	1	10	44	C	A
		2845 0182	Module capacitor	CNB6X101K	1	10	43	C	A
		2845 3934	Three polarity capacitor	DS310-92D223S-T	7	10	18	C	A
		3035 0266	Ferrite beads	BL02RN2-R62T4-T	12	10	13	C	A
		3501 4816	DIN jack	YKF51-5051	1	1	110	B	B
		3501 7049	DC jack	HEC2305-01-330	1	10	29	A	A
		3612 0711	Miniature jack	YKB21-5101	1	5	90	B	B
		3612 0789	Jack	YKB21-5010	1	5	60	B	B
		3841 0539	Inductor	ELE-V100KR-T	11	20	26	C	A
N		4317 4221	Blank PCB M5711-MA1M	M111758A-1	1	1	680	C	G
N		6922 3740	PCB ass'y M5711-MA1M	M111774*1	1		9,570	B	CC
		PCB ass'y M5711-CN1M							
N		2114 3318	IC, Monolithic	BA612	1	5	98	A	B
		2370 0343	LED	LN28RPX-(TT)	9	20	16	C	A
		2370 0952	LED	LB-603VP1	1	1	240	C	C
N		2370 0959	LED	LN882RPX-(TT)	2	20	27	C	A
		2390 1344	Diode	1SS133T-77-T	37	20	3	C	A
N	JC	3719 4235	Ribbon cable M711C	DF5H12120-MM	2	10	33	C	A
N		4317 4231	Blank PCB M5711-CN1M	M111759A-1	1	1	280	C	C
N		6922 3760	PCB ass'y M5711-CN1M	M111775*1	1	1	1,280	C	N
		PCB ass'y M616T-KY1M							
		2301 0101	Diode	1S2473-T-77-T	64	20	8	C	A
N	JA	3719 4242	Ribbon cable M711A	DF5H16220-MM	1	5	68	C	B
		4317 4151	Blank PCB M616T-KY1M	M111748A-1	1	1	240	C	C
N		6922 3900	PCB ass'y M616T-KY1M	M111750*2	1	1	710	C	H
		PCB ass'y M616T-KY2M							
		2301 0101	Diode	1S2473-T-77-T	58	20	8	C	A
N	JB	3719 4249	Ribbon cable M711B	DF5H17310-MM	1	5	93	C	B
		4317 4161	Blank PCB M616T-KY2M	M111749A-1	1	1	190	C	C
		6909 6240	Sponge 35X200	M42674-2	1	20	25	C	A
N		6922 3910	PCB ass'y M616T-KY2M	M111751*2	1	1	860	C	I

Notes: N – New parts
M – Minimum order/supply quantity
R – Rank

N	Item	Code No.	Parts Name	Specification	Q	M	FOB Japan N.R.Yen Unit Price	R	*
		Mechanical Parts							
N	1	6922 3800	Display window 711	M312128-1	1	5	93	C	B
	2	6921 5040	Slide volume knob 601	M311860-1	1	10	13	B	A
N	3	6922 3820	Panel 711	M111744-1	1	1	890	C	J
N	4a	6922 3830	Rubber button 711A	M312122-1	1	10	31	B	A
N	4b	6922 3840	Rubber button 711B	M312123-1	1	10	32	B	A
N	5	6922 3850	Rubber button 711C	M312124-1	1	1	110	B	B
N	6	6922 3860	Rubber button 711F	M211727-1	1	1	130	B	B
N	7	6922 3870	Rubber button 711D	M312125-1	1	5	72	B	B
	8	6922 2660	Rubber button 710C	M312088-1	1	1	97	B	B
N	9	6922 3880	Rubber button 711D	M312125-2	1	5	73	B	B
N	10	6922 3890	Rubber button 711E	M312126-1	1	5	73	B	B
	11	6922 2680	Rubber button 710D	M312082-2	1	10	29	B	A
	12	3831 0357	Speaker	1221AF	2	1	1,000	B	K
	13	6922 2840	LT White key set CEGB	M111723-1	5	1	100	A	B
	14	6922 2850	LT White key set DFA	M111724-1	4	1	100	A	B
	15	6922 2860	LT White key set DFAS	M111725-1	1	1	100	A	B
	16	6922 2740	LT Black key set10P	M111726-1	2	1	120	A	B
	17	6922 2750	LT Black key set 5P	M111726-2	1	5	86	A	B
	18	6922 2760	Key contact rubber LT-CB	M211704-1	4	5	89	A	B
	19	6922 2770	Key contact rubber LT-CS	M211705-1	1	5	91	A	B
N	20	6922 3923	Case ass'y	M111732C*2	1	1	1,300	C	N
N	21	6918 1634	Battery cover sub ass'y	M311164D*1	1	1	200	B	C
	22	6922 2631	Bottom plate 710	M211706A-1	1	1	360	C	D
	20-1	6902 6140	Battery spring 90	M41226-1	1	10	27	B	A
	20-2	6903 2150	Battery spring B	M41330-1	1	10	18	B	A
	20-3	6922 2810	Lower stopper 710	M412287-1	1	1	98	C	B
	20-4	6922 2820	Upper stopper 710	M412286-1	1	1	75	C	B
	20-5	6922 4480	Key damper 710	M412324-1	1	1	55	C	B
		6920 8691	Music stand 590	M311760A-1	1	1	130	B	B
		Screws							
	23	0009 2680	Screw	4 x 8	15	50	2	C	A
	24	0009 2682	Screw	2.6 x 8	43	50	2	C	A
	25	0009 4588	Screw	2.6 x 18	21	50	2	C	A
	26	0009 6417	Screw	4 x 10	32	50	2	C	A

Notes: N – New parts
M – Minimum order/supply quantity
R – Rank

EXPLODED VIEW



CASIO COMPUTER CO.,LTD.
Service Division

8-11-10, Nishi-Shinjuku
Shinjuku-ku, Tokyo 160, Japan
Telephone: 03-3347-4926

MA0200941A